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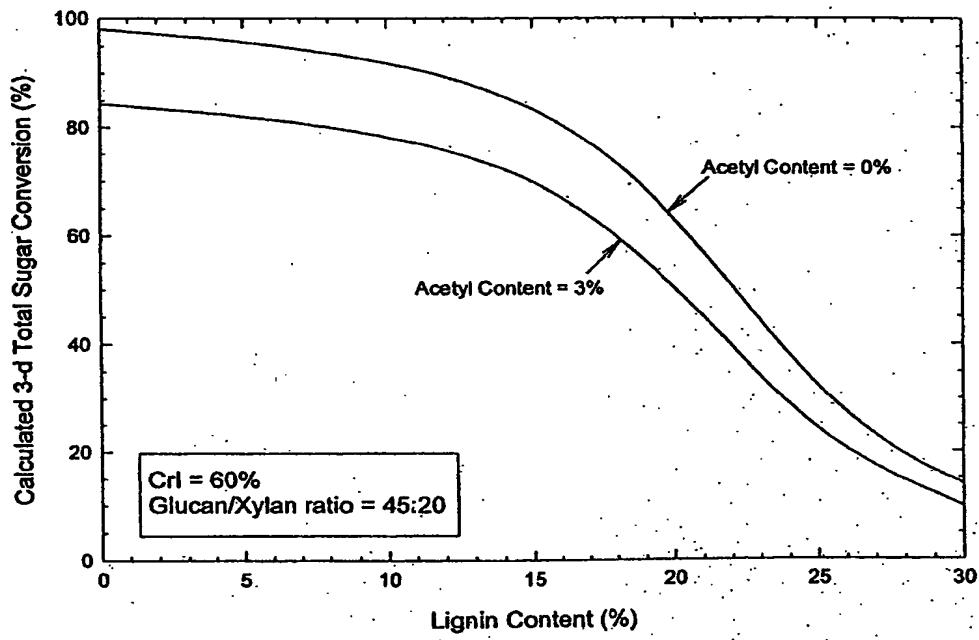


Fig. 1
PRIOR ART

METHODS AND SYSTEMS FOR
PRETREATMENT AND PROCESSING OF
BIOMASS Filed: 10/31/03
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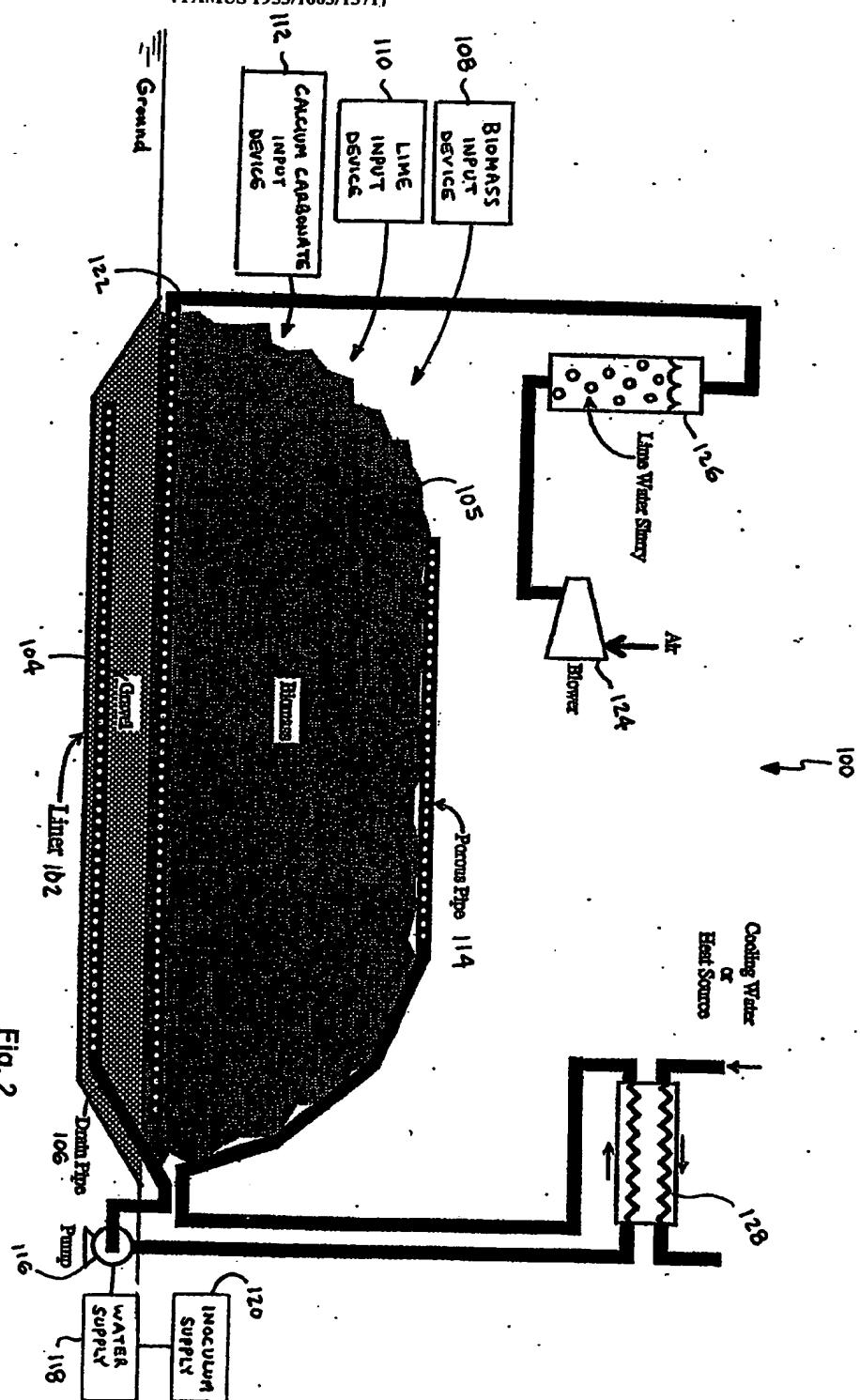


Fig. 2

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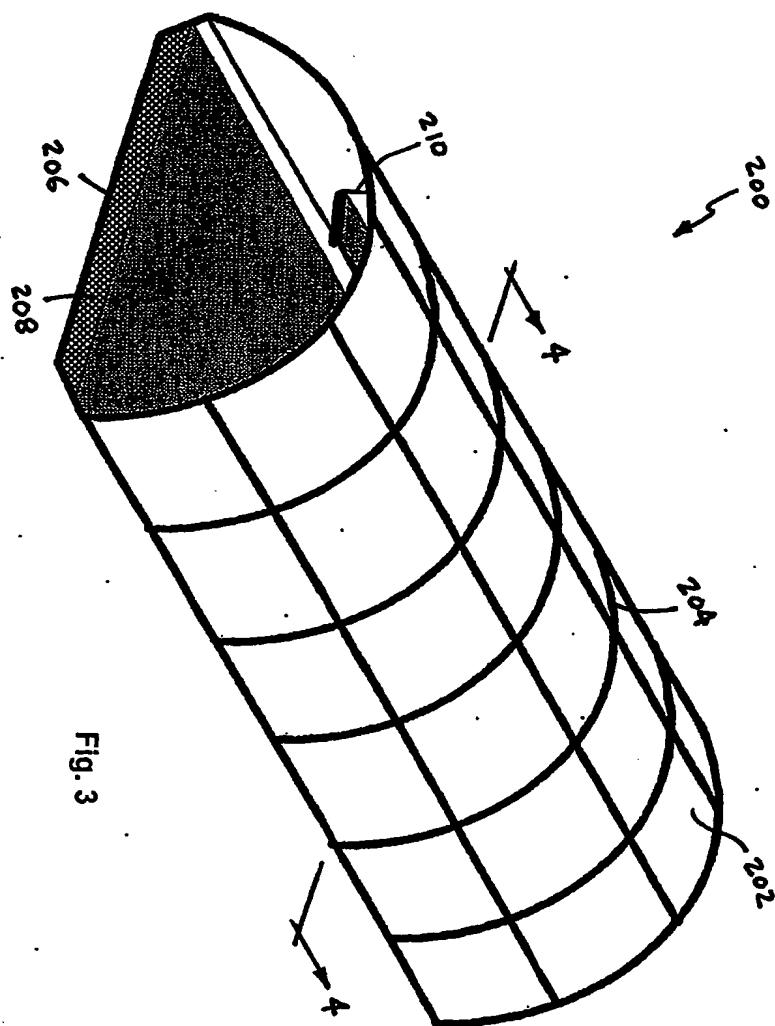
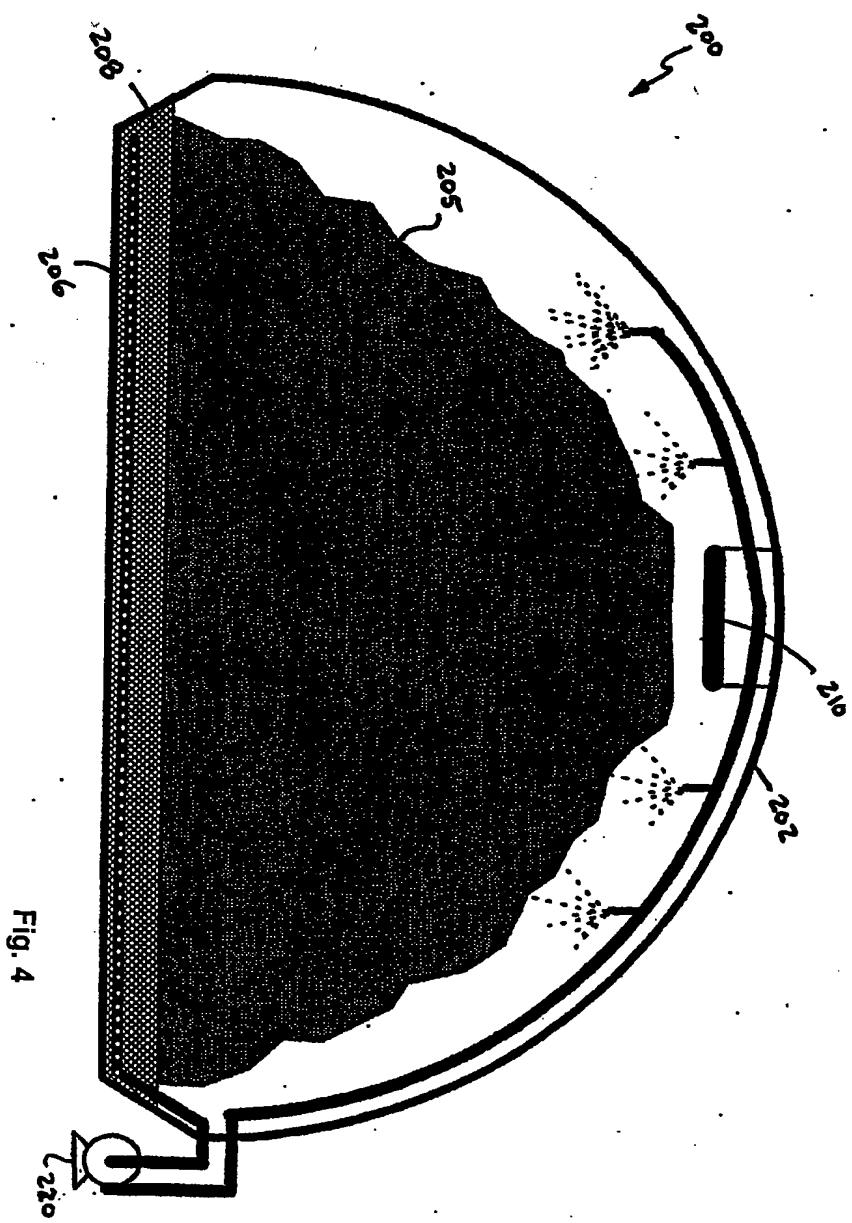


Fig. 3

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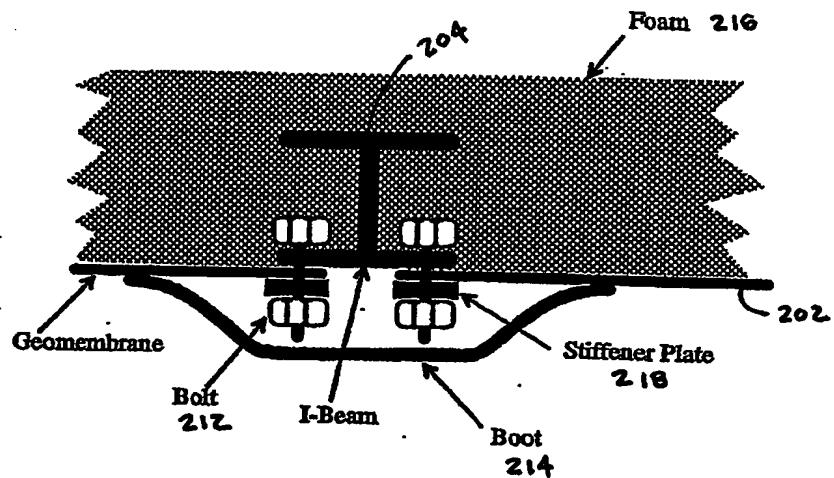


Fig. 5

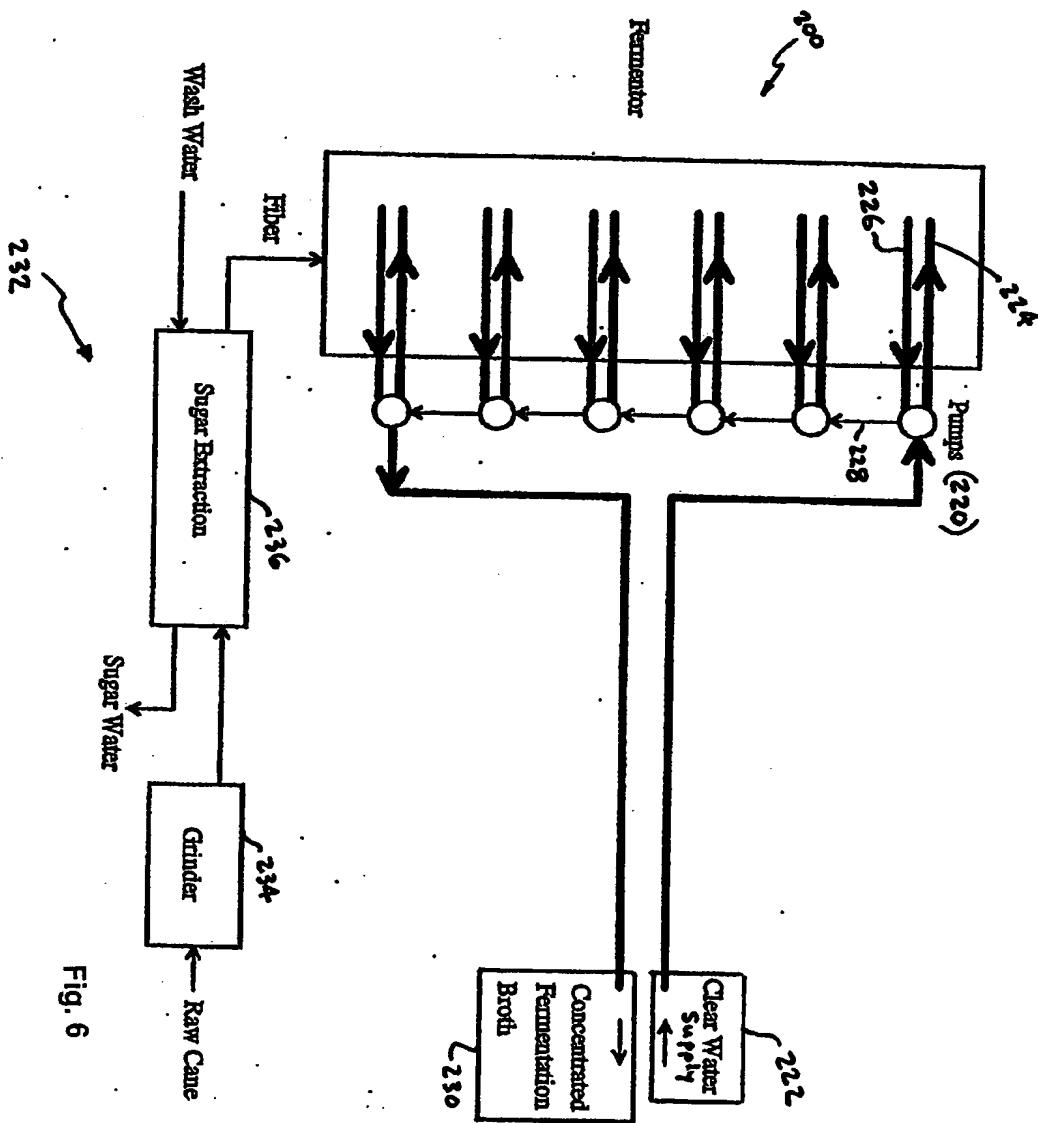
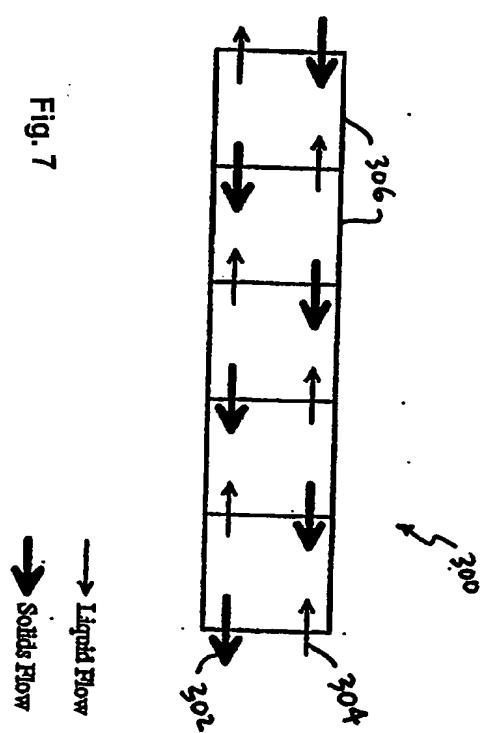


Fig. 6

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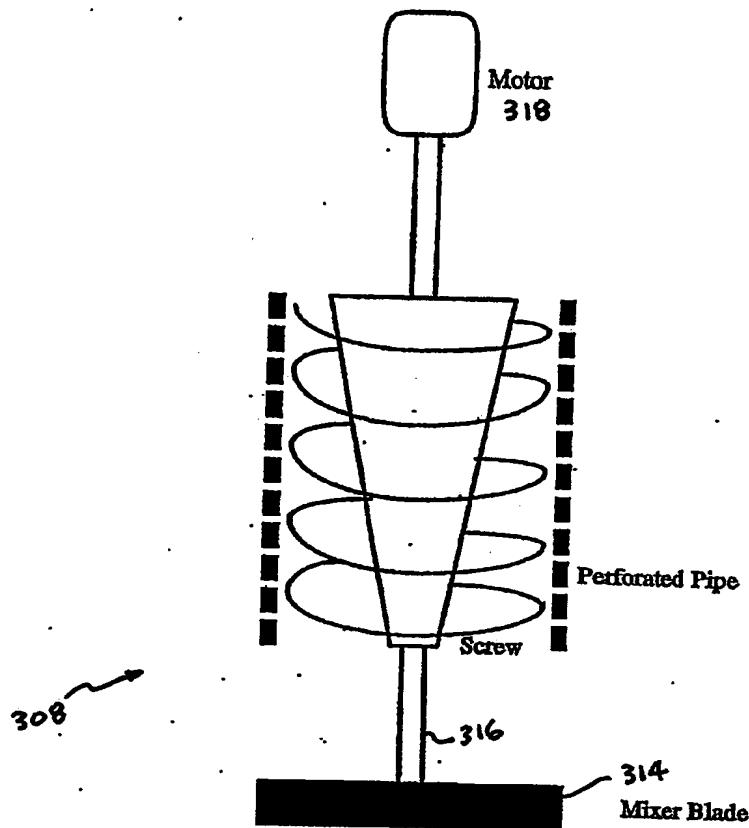
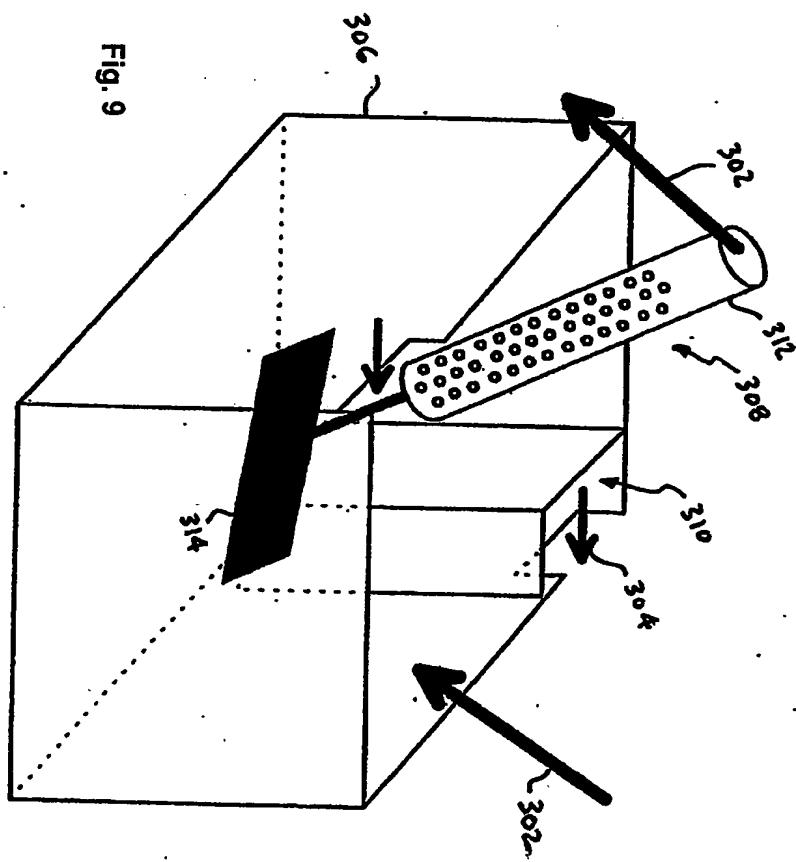
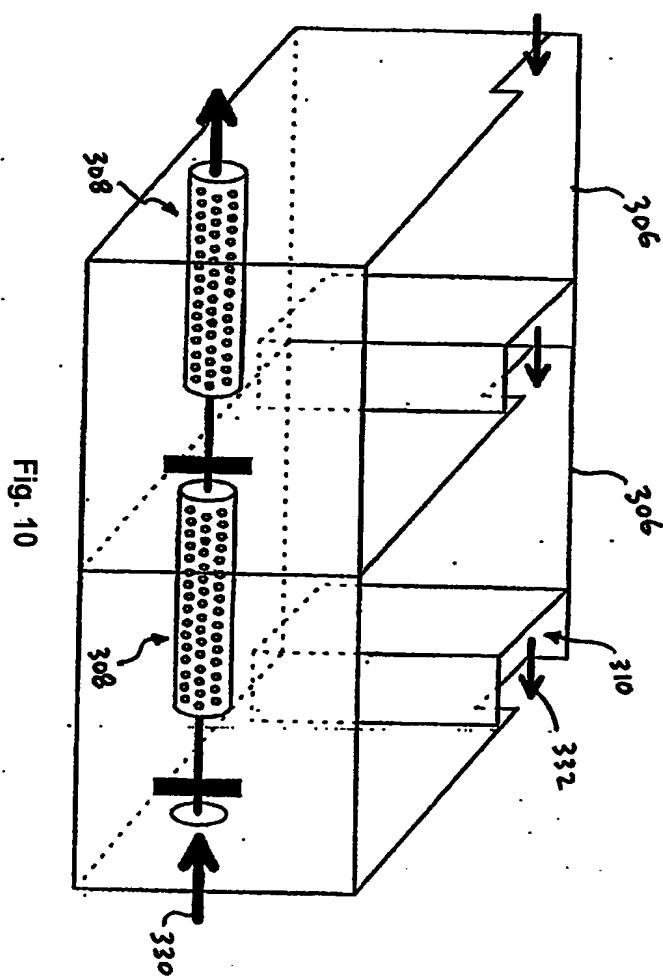


Fig. 8

Fig. 9



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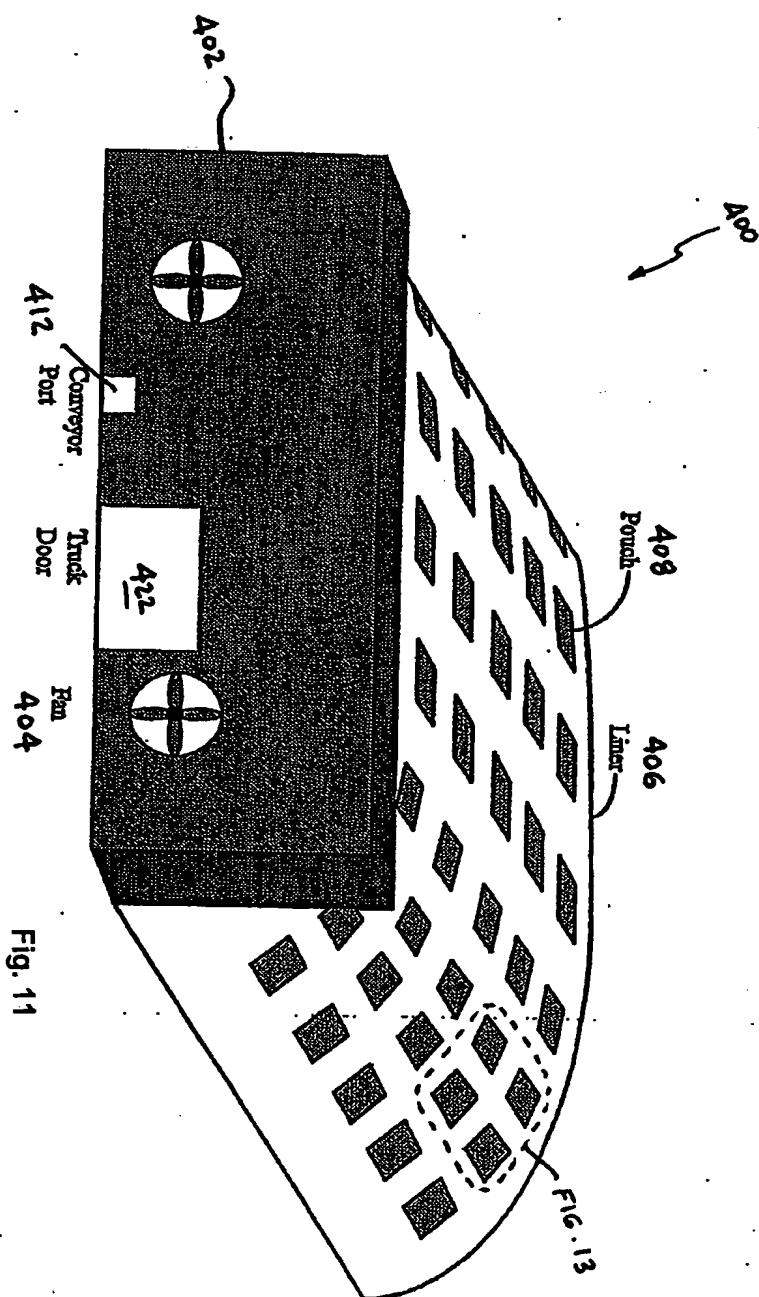


Fig. 11

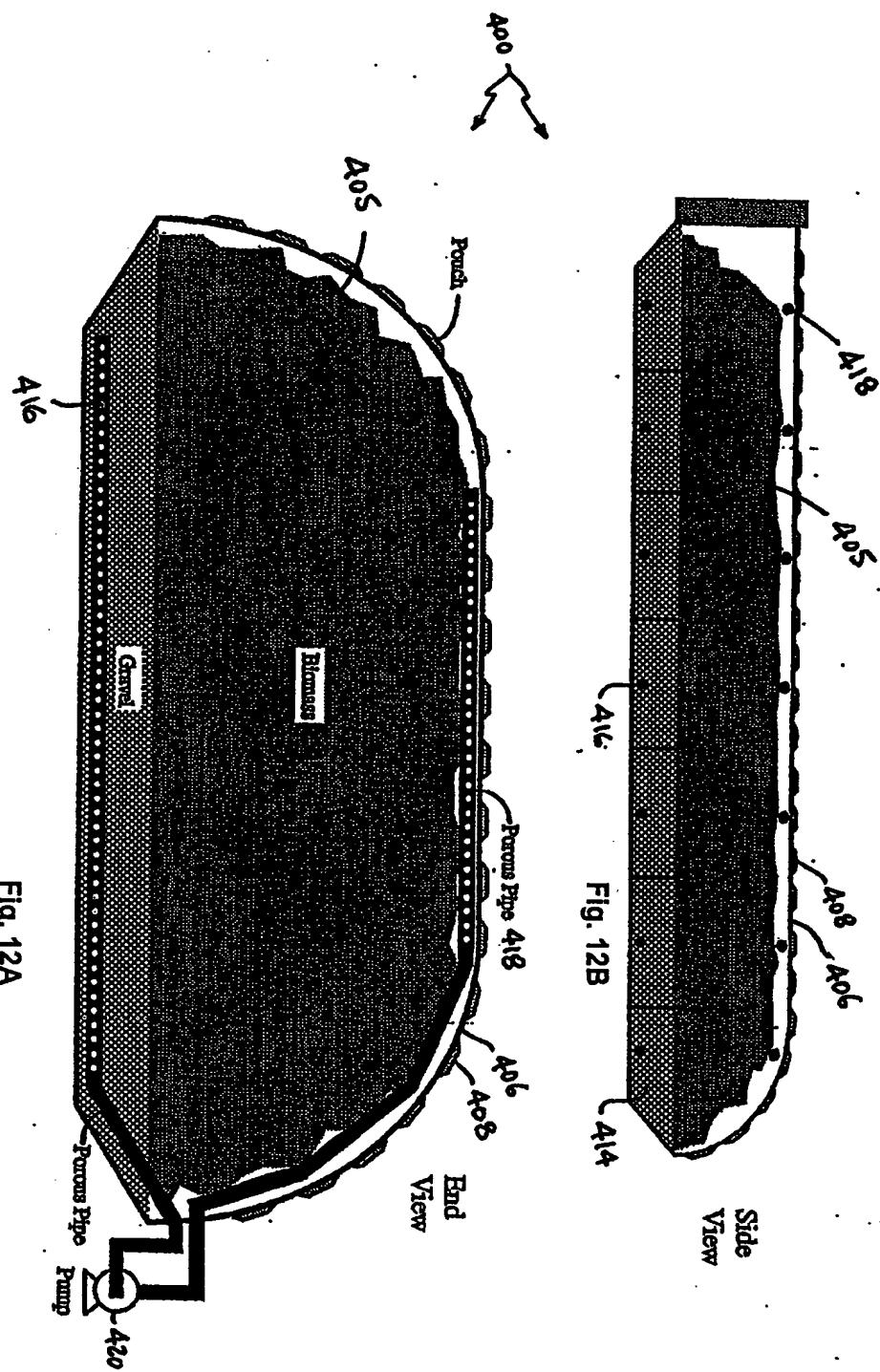
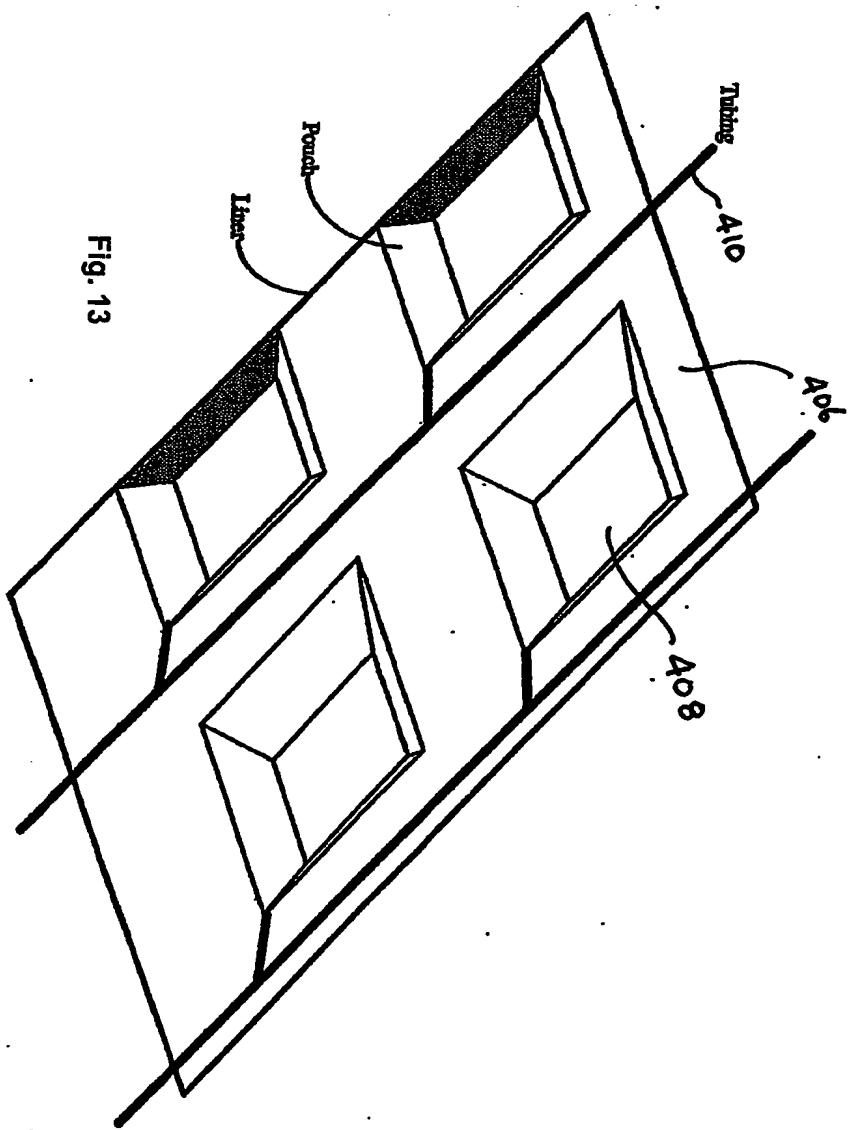


Fig. 12A

Fig. 12B

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Fig. 13



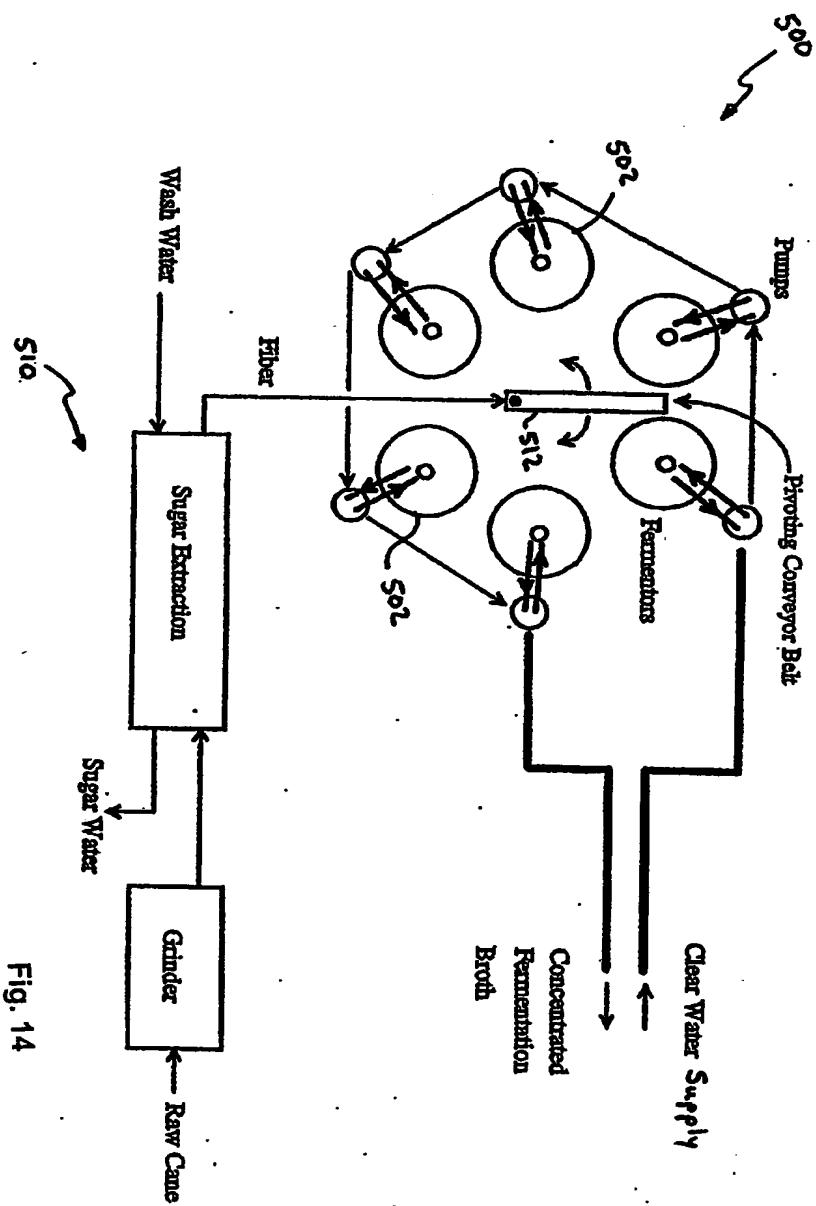


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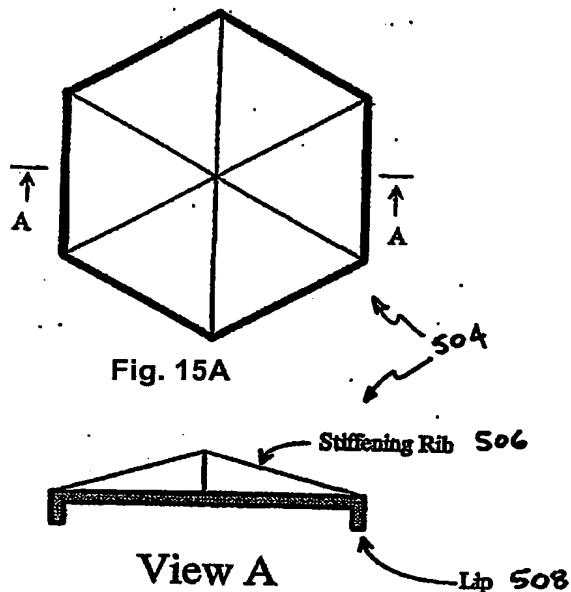


Fig. 15B

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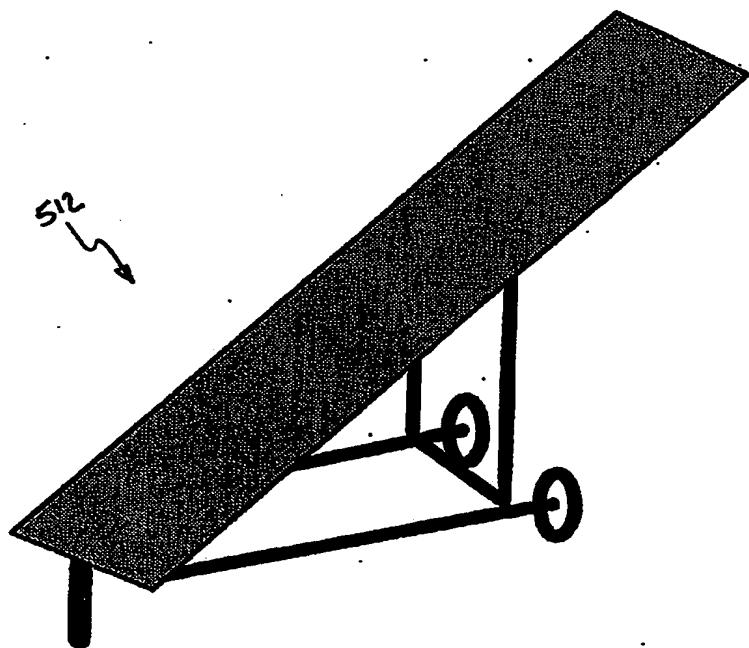


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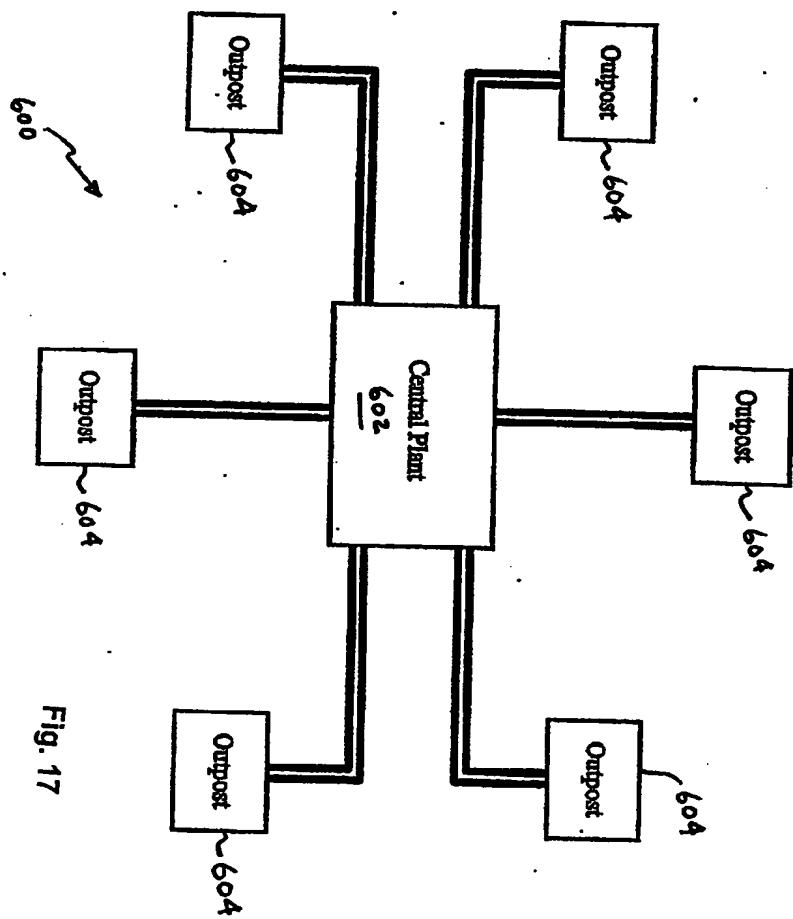


Fig. 17

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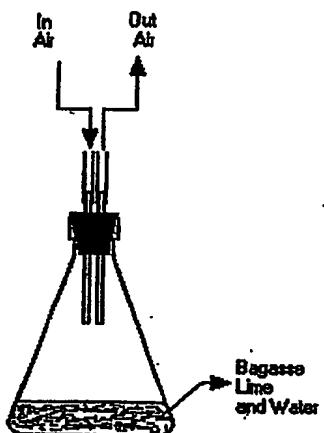


Fig. 18

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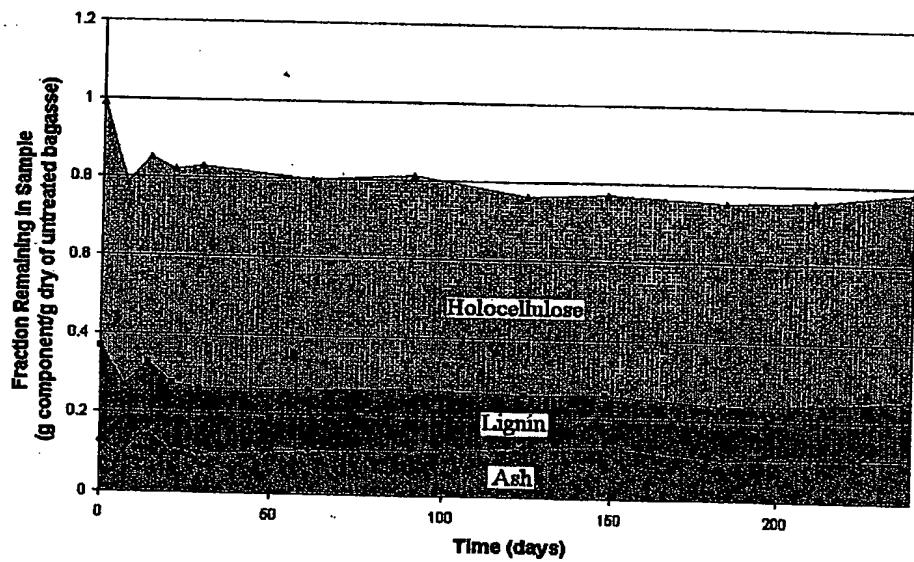


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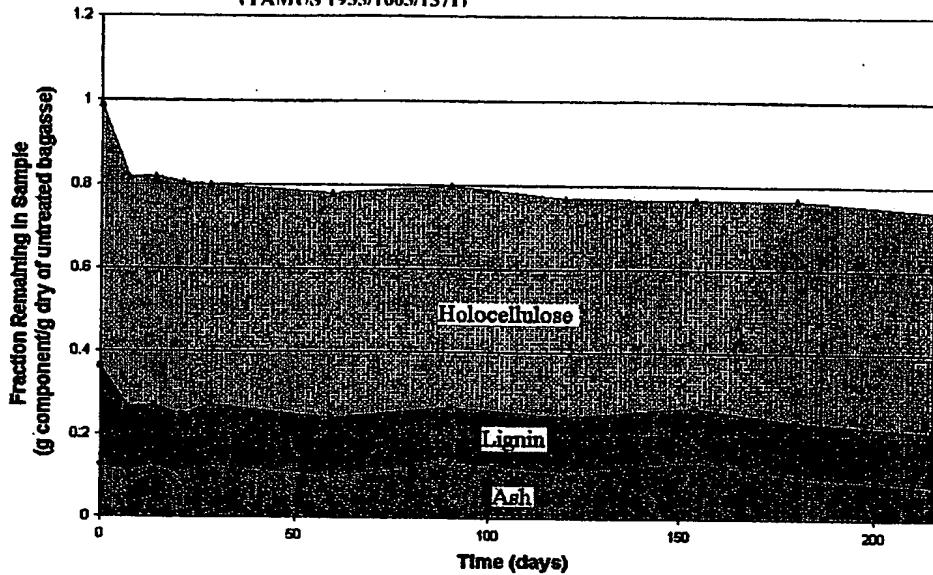


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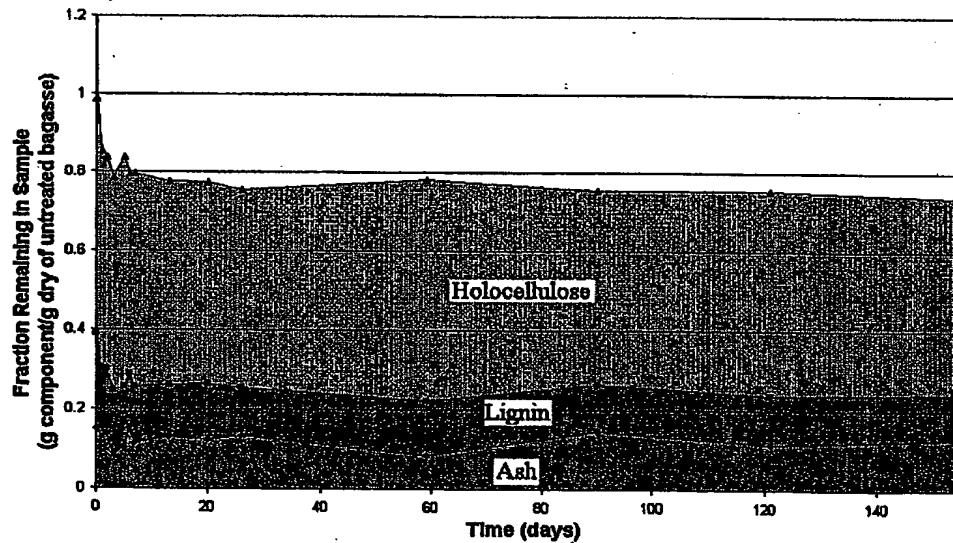


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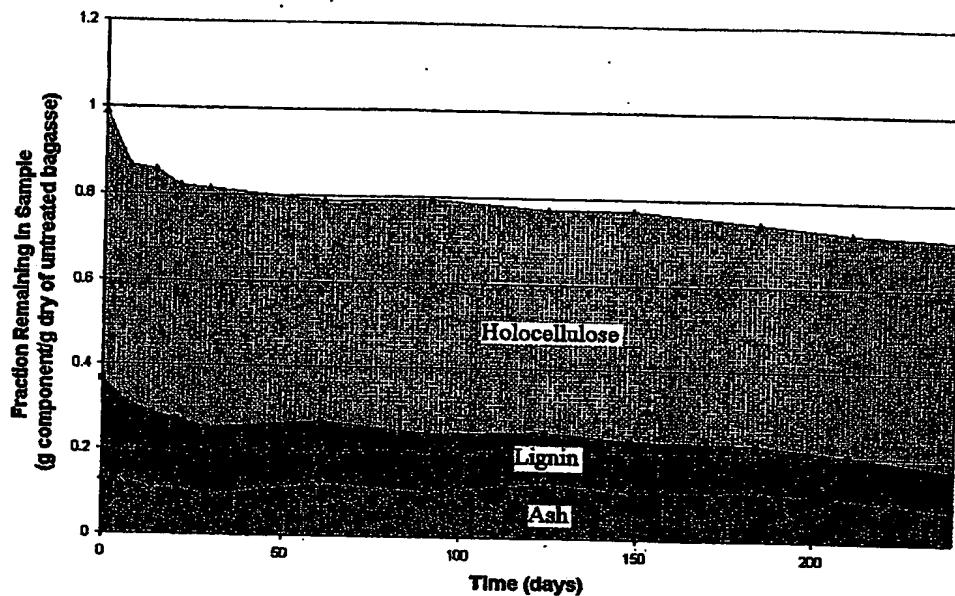


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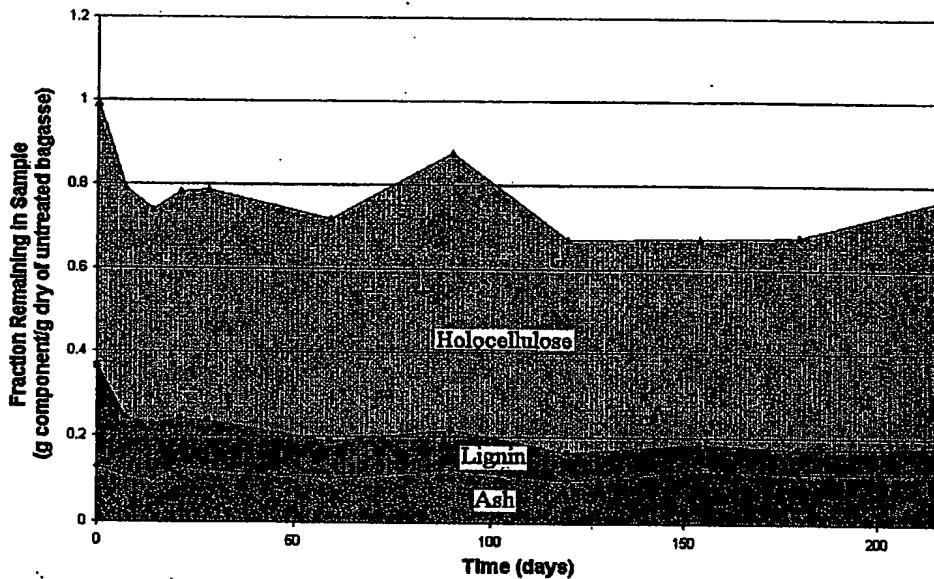


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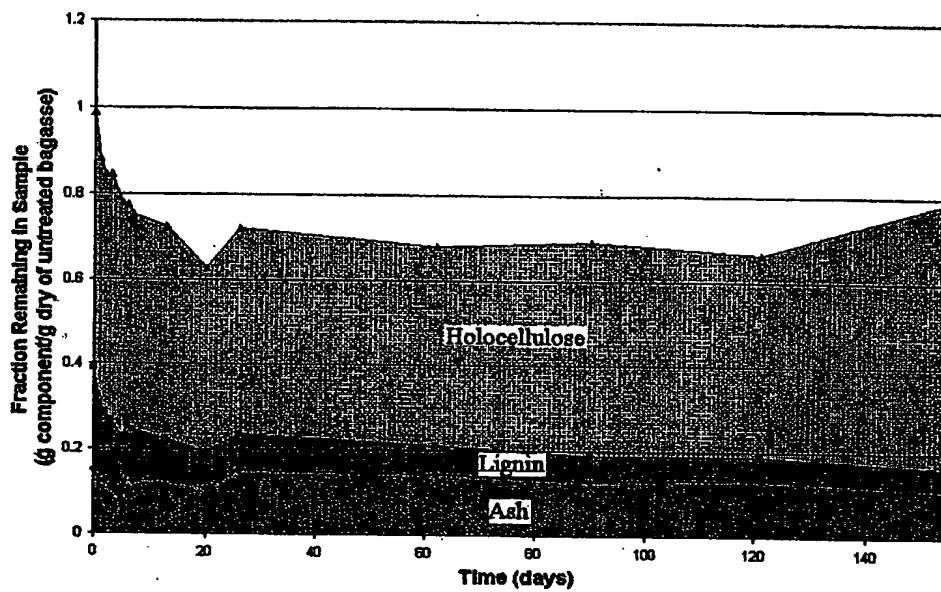


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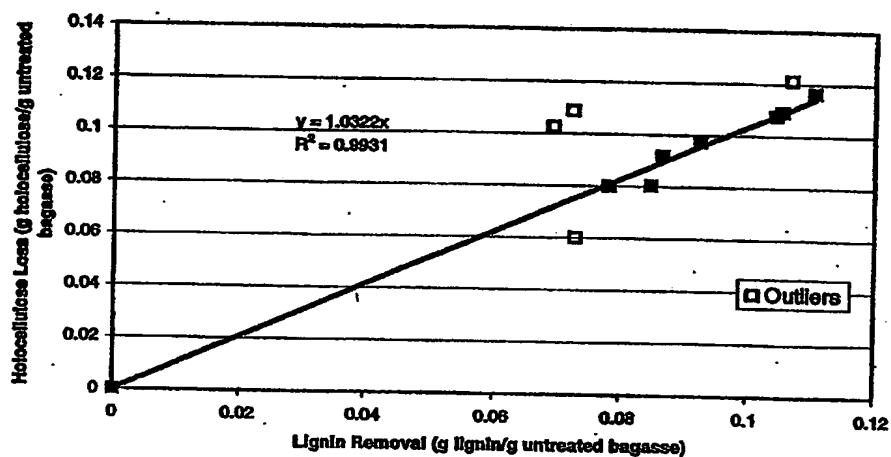


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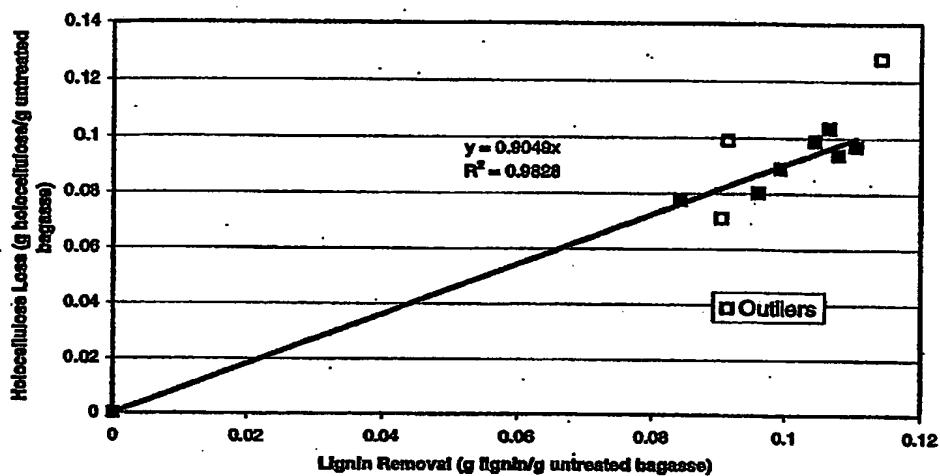


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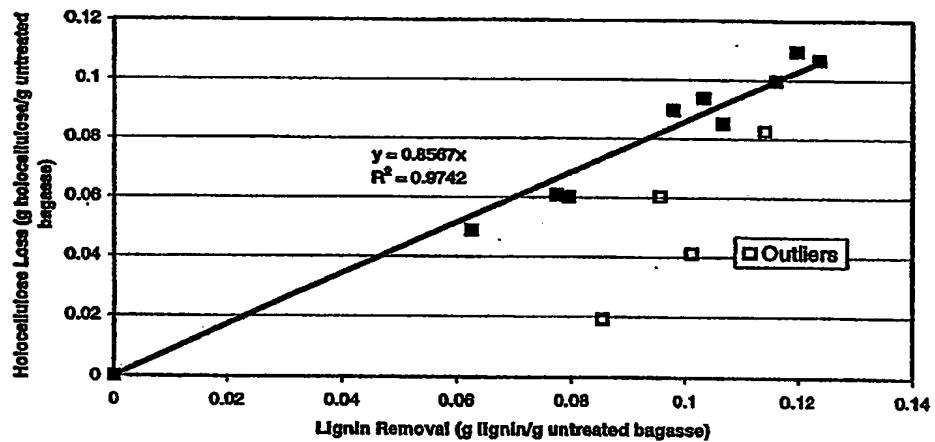


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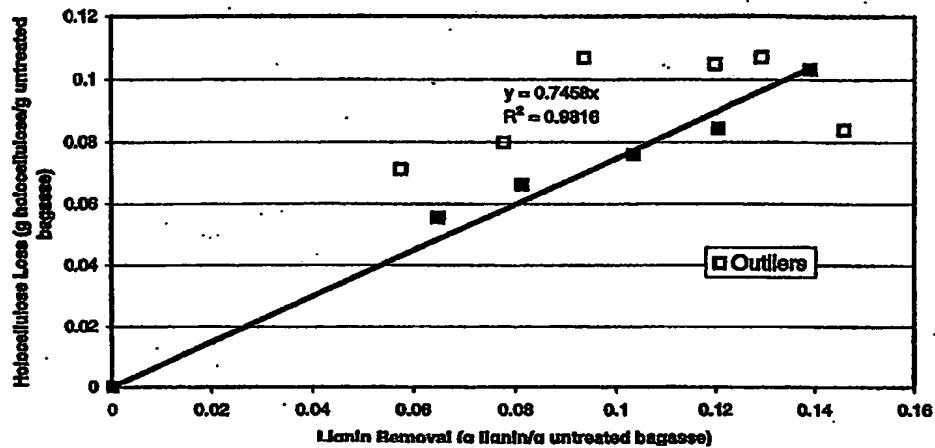


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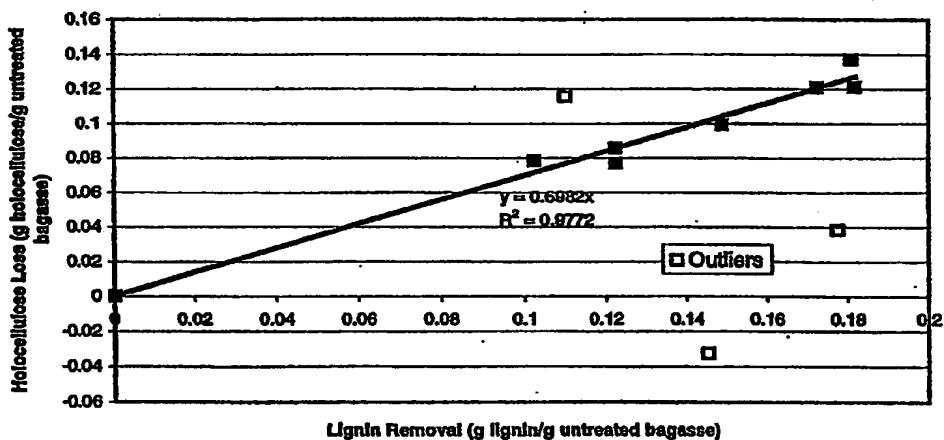


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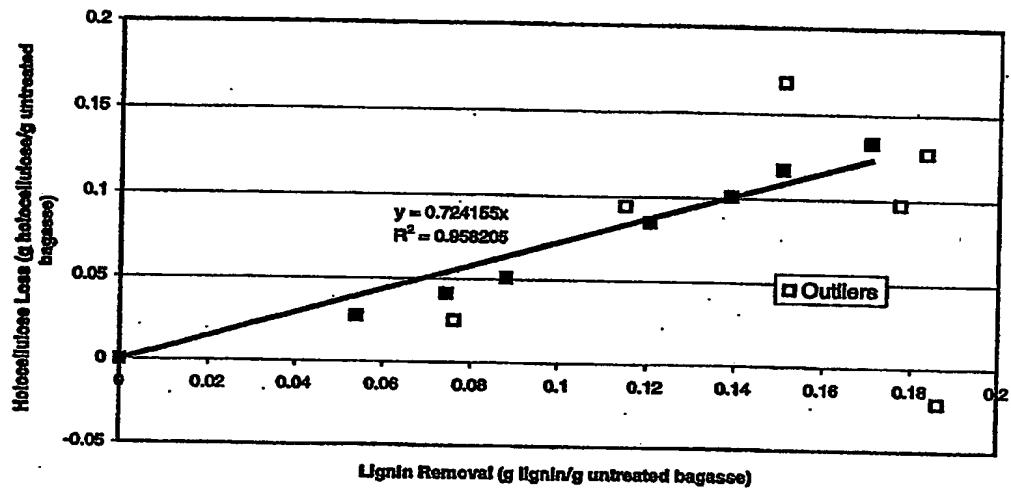


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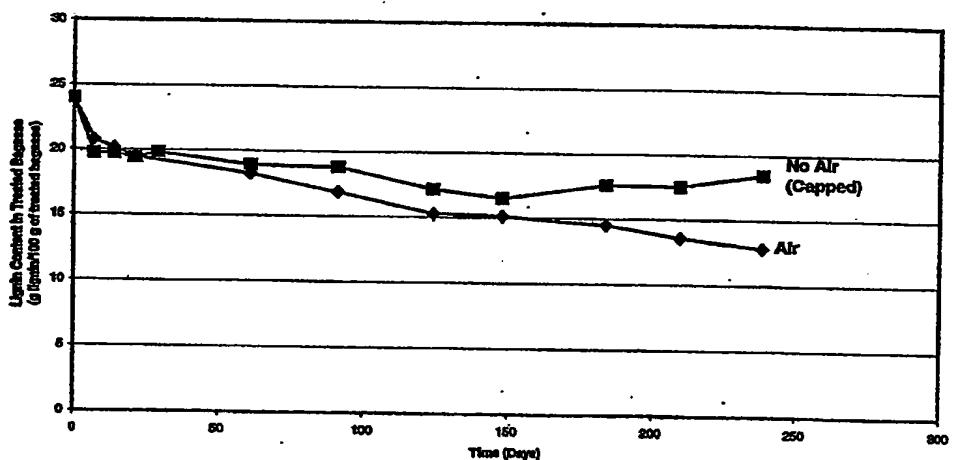


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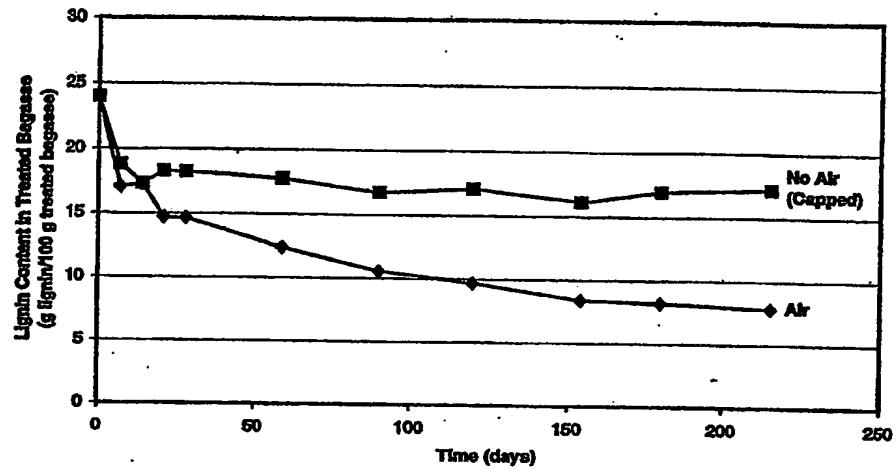


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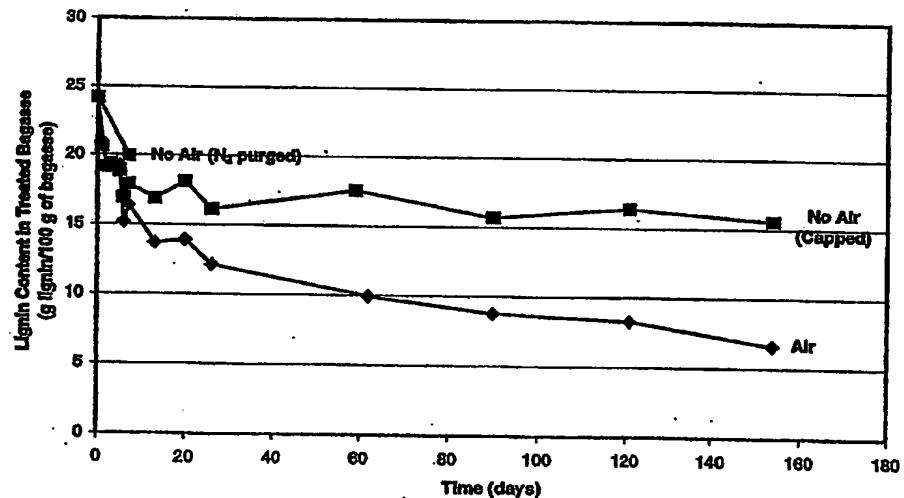


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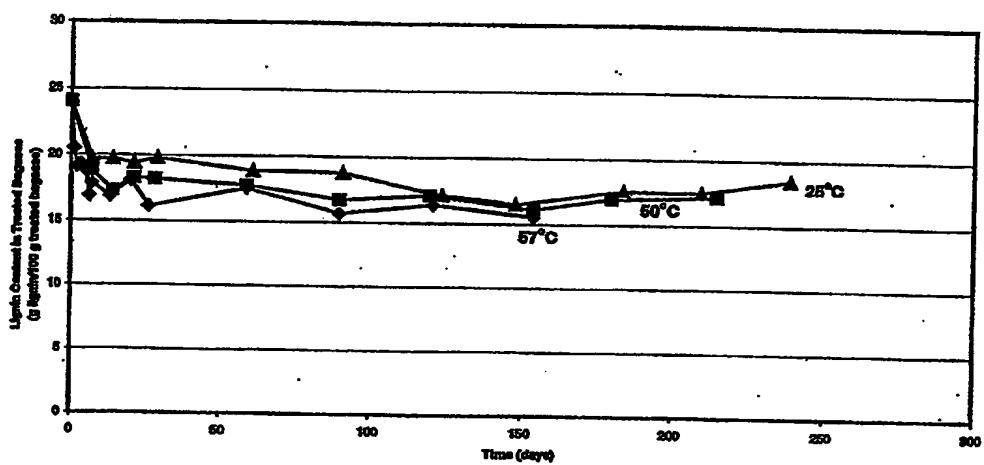


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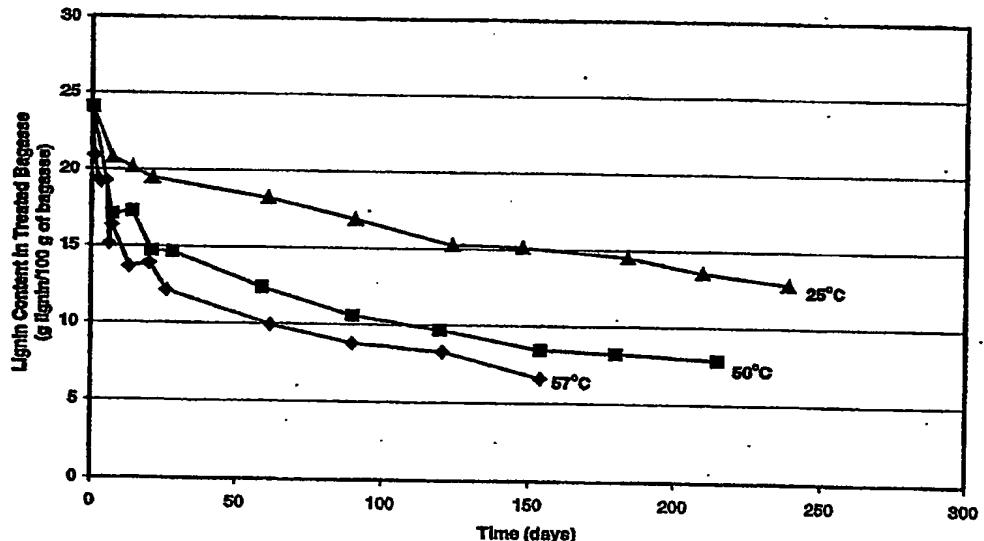


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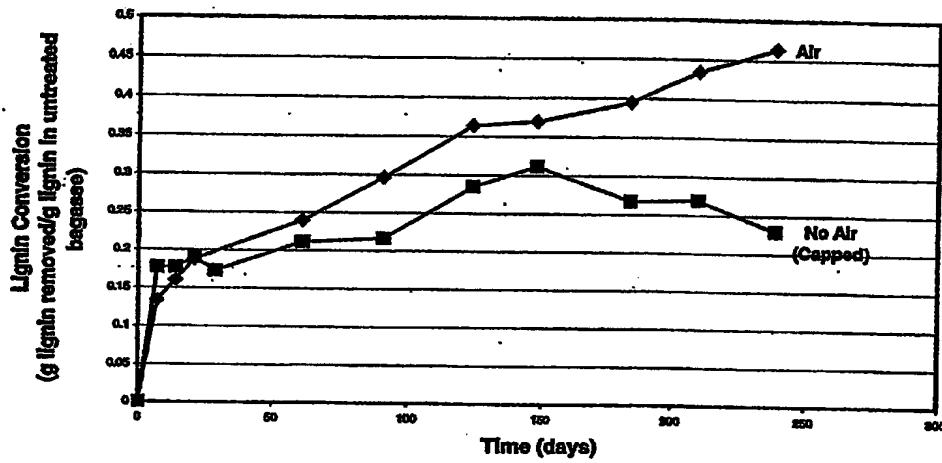


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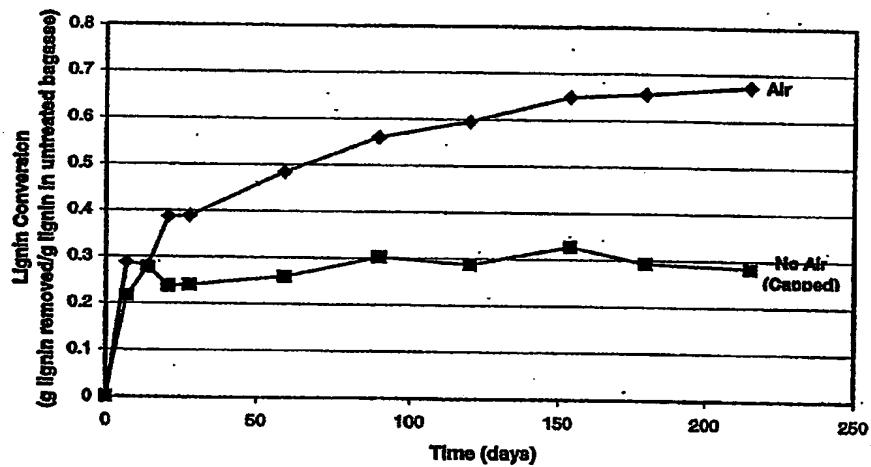


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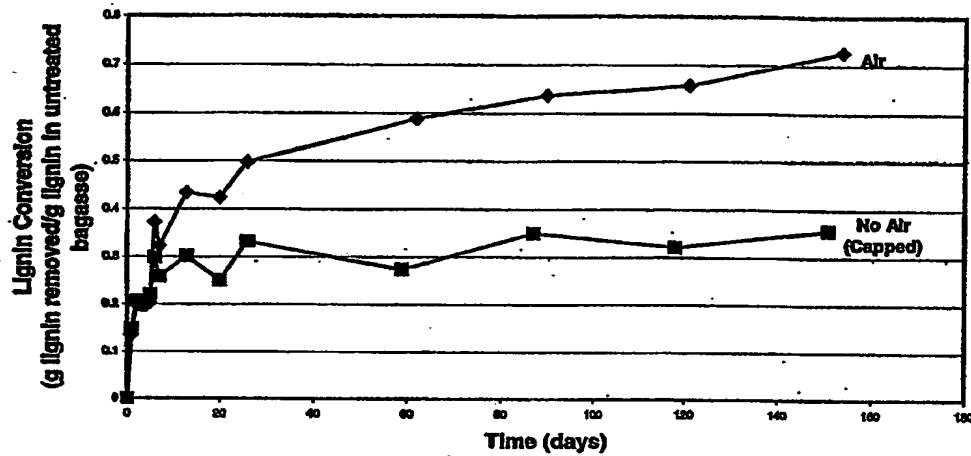


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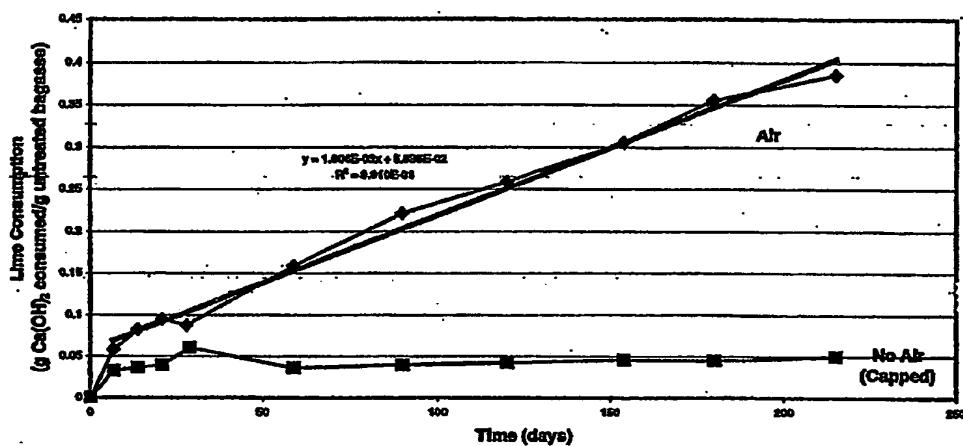


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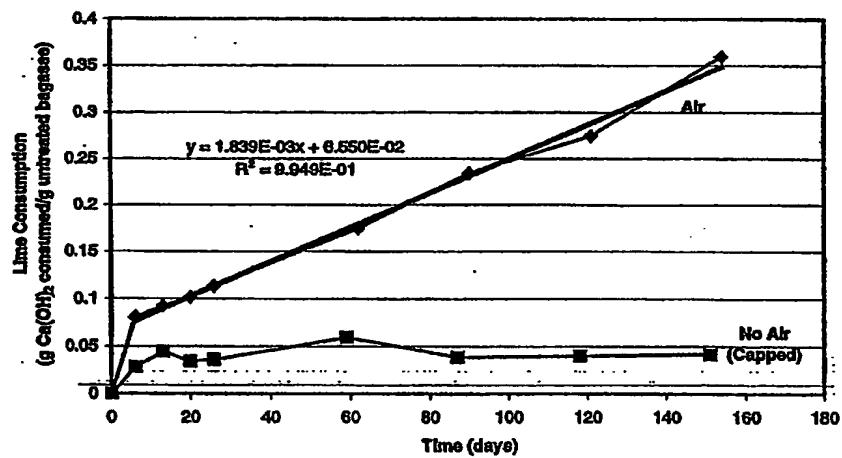


Fig. 40

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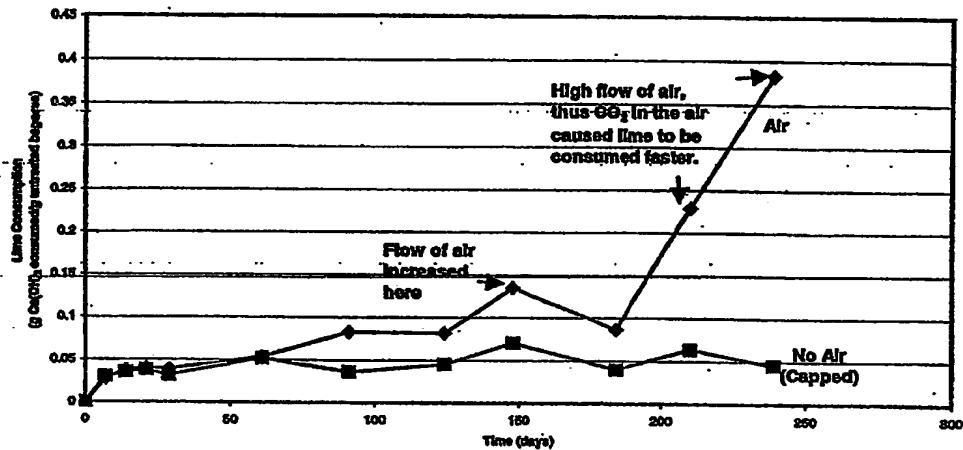


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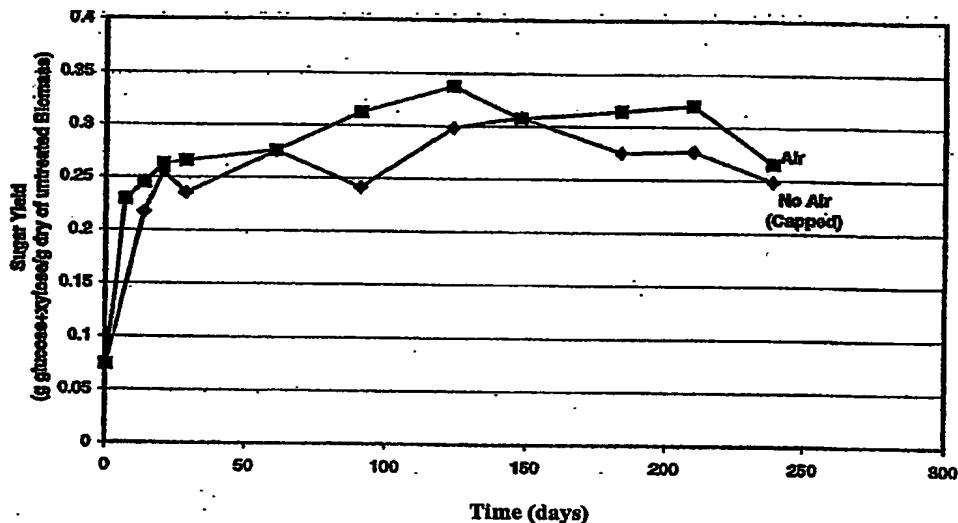


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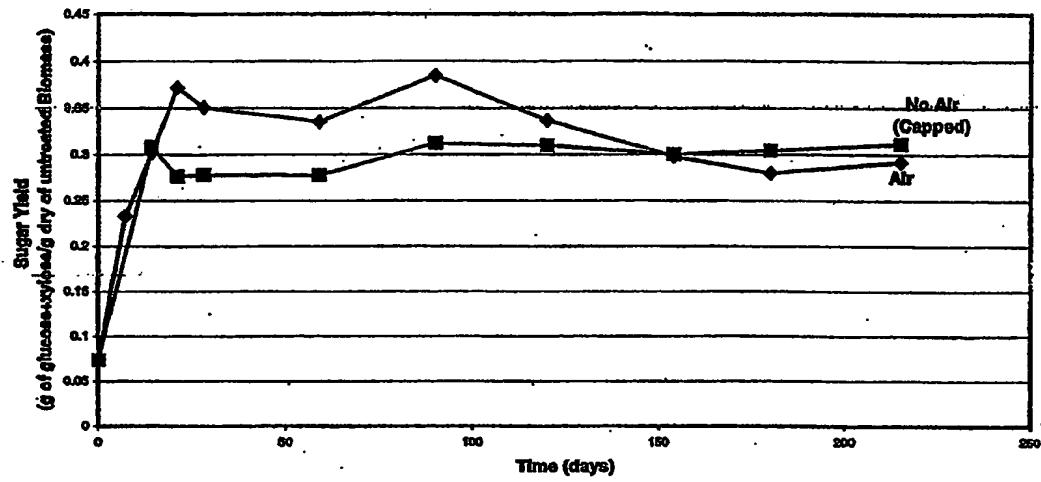


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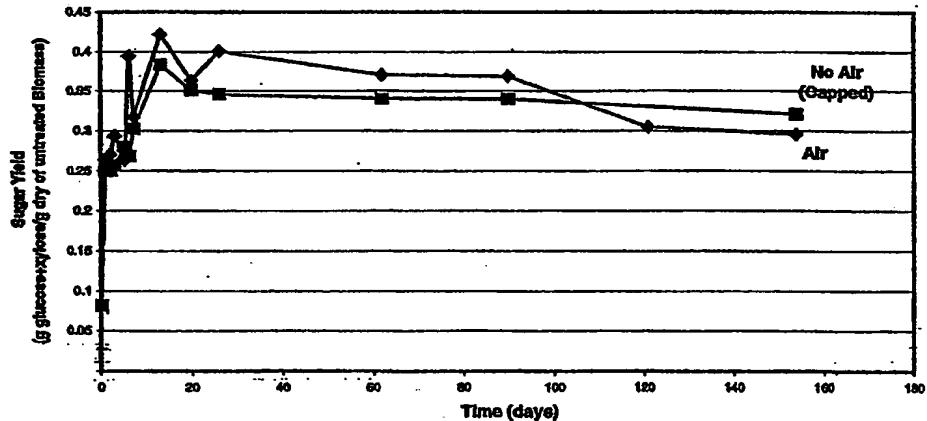


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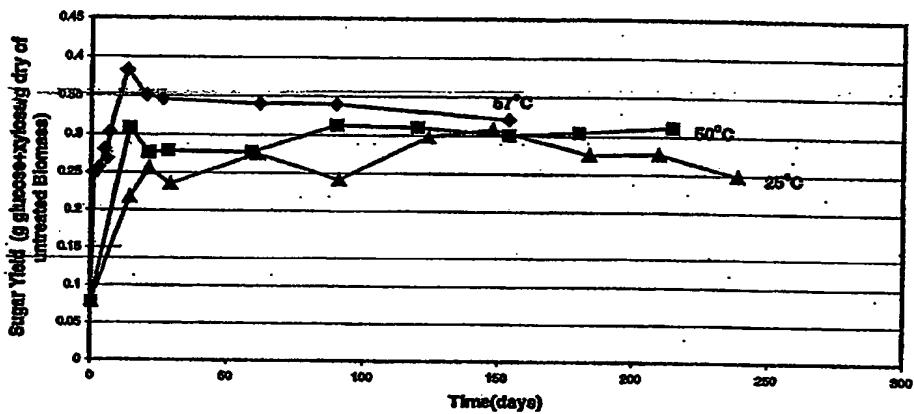


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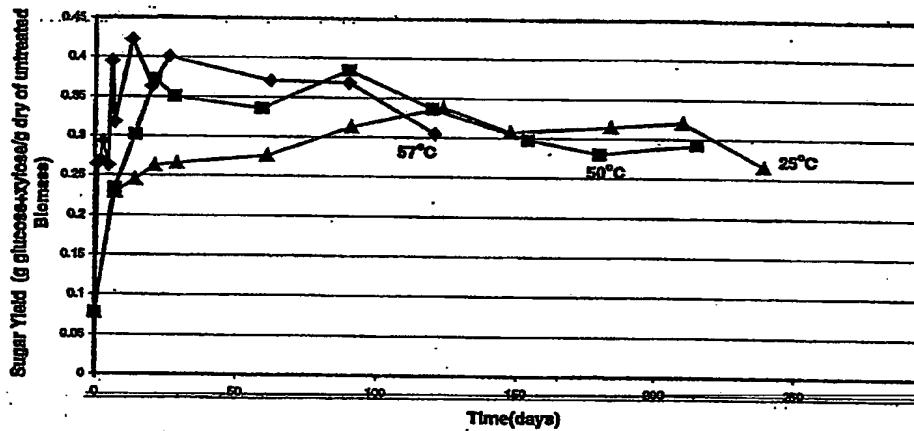


Fig. 46

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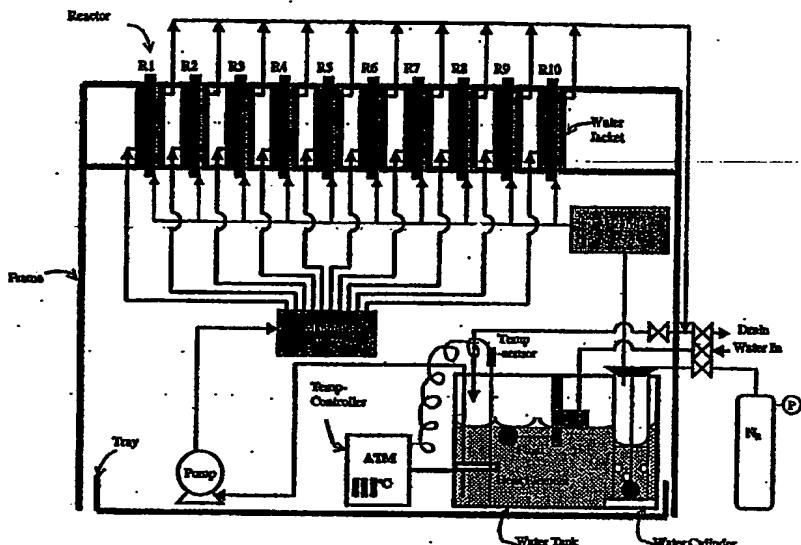


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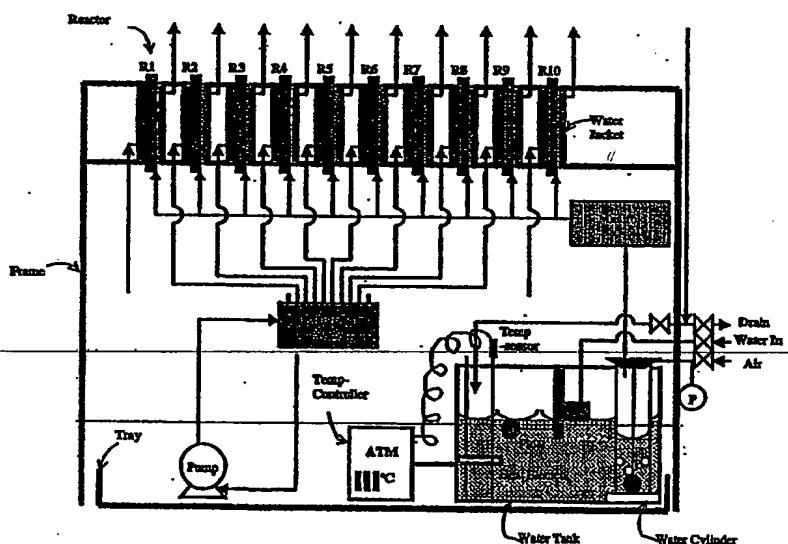


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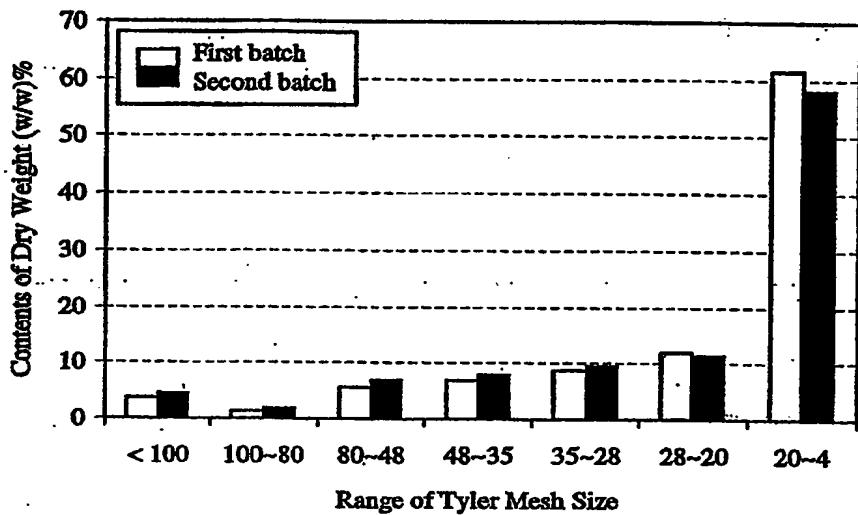


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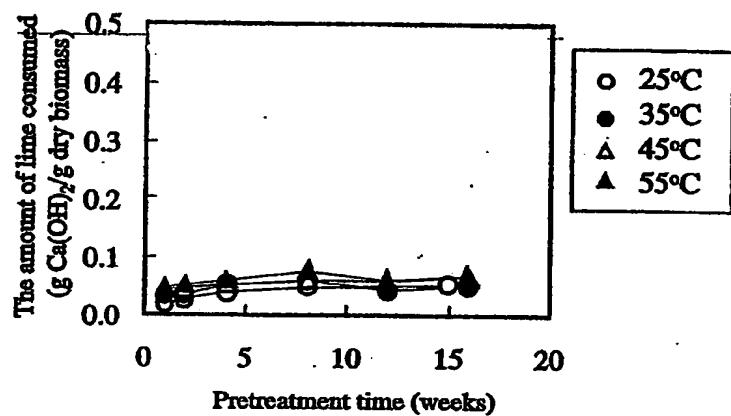


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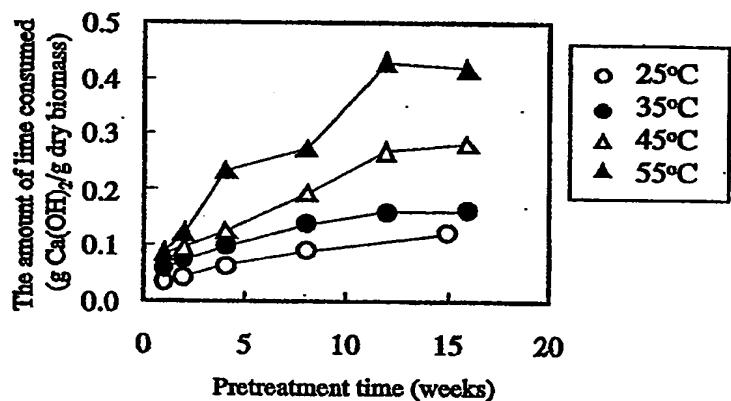


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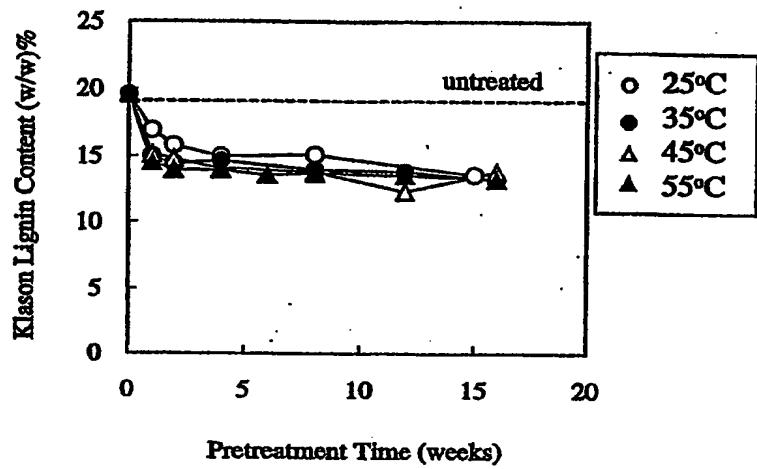


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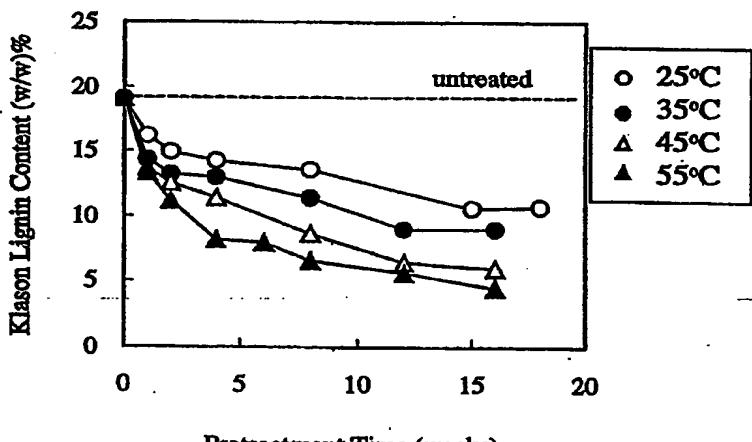


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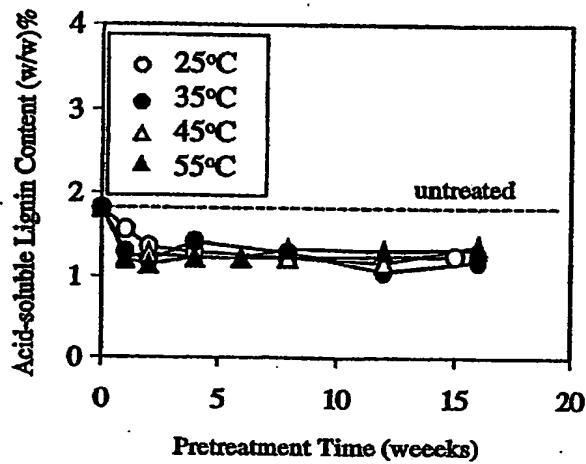


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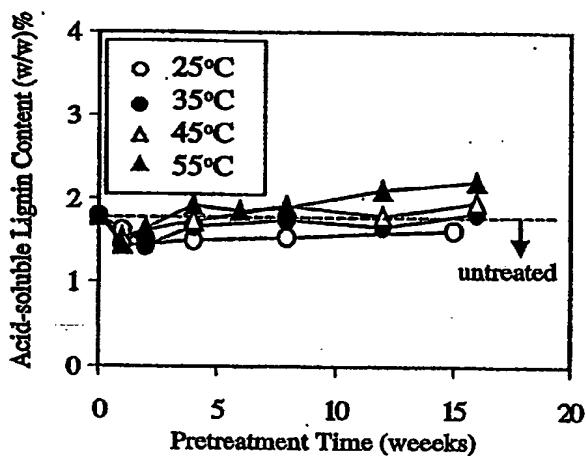


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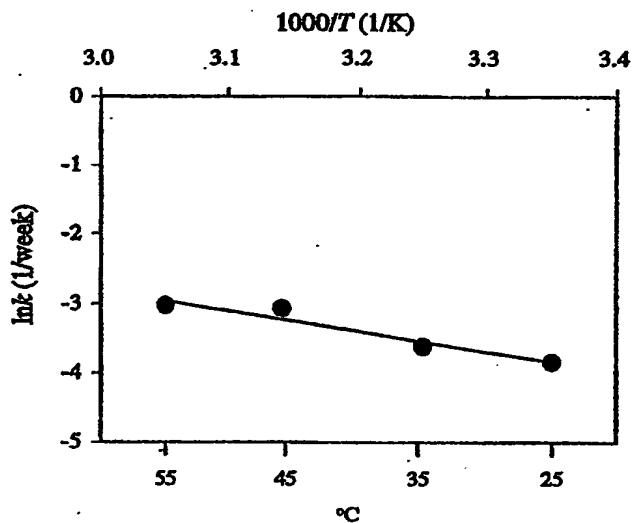


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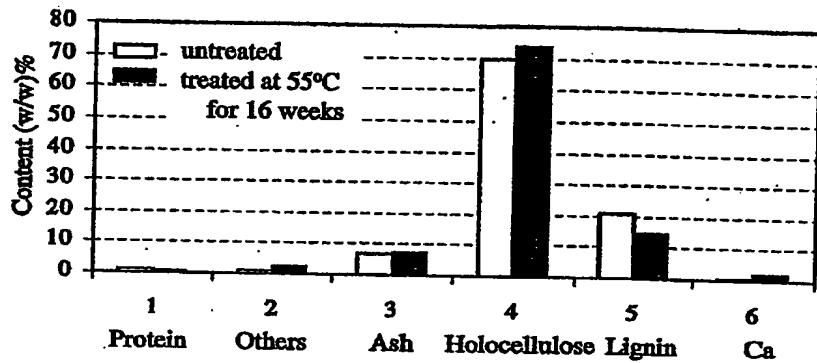


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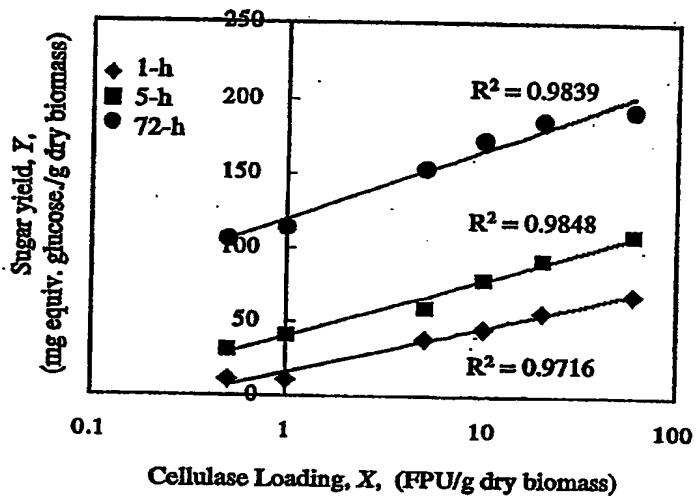


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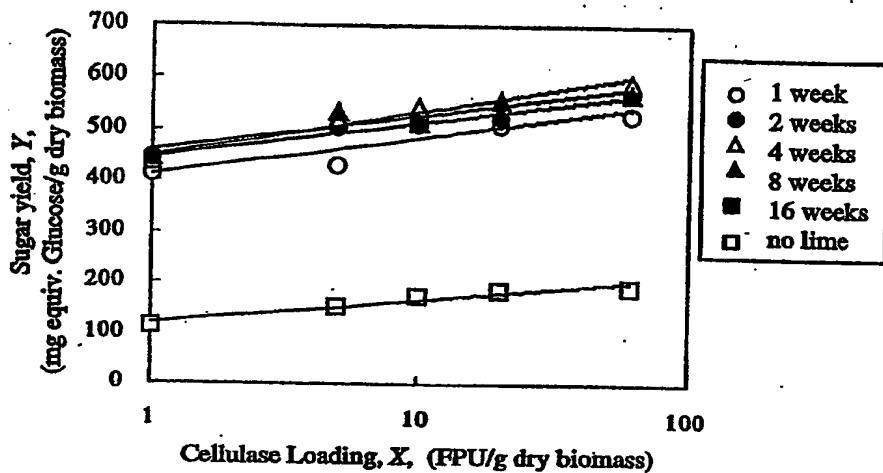


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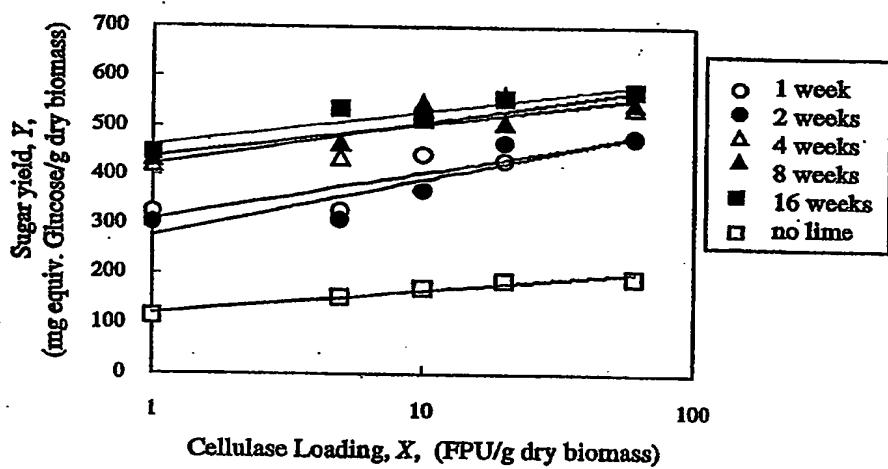


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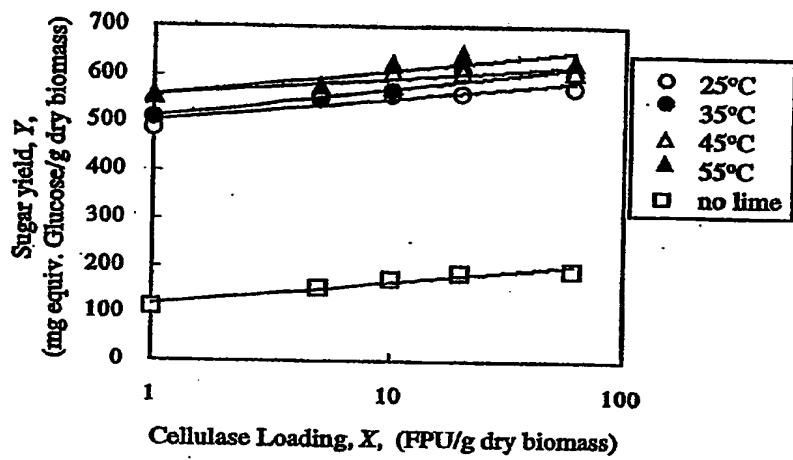


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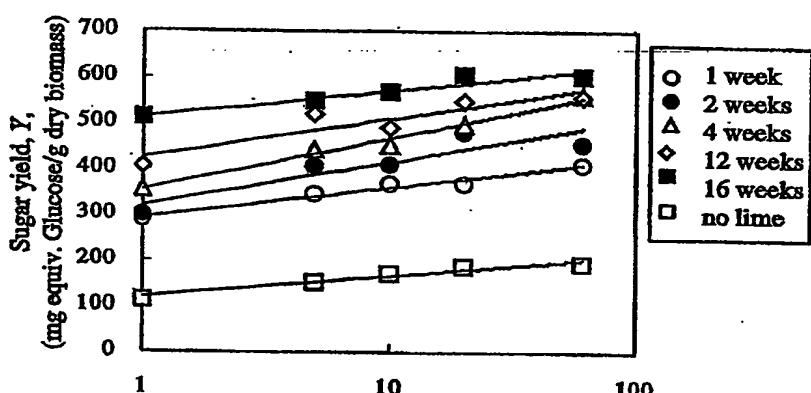
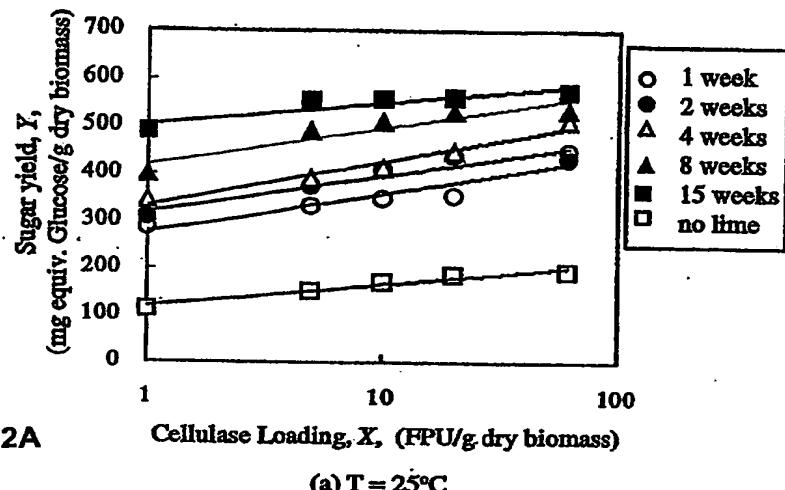
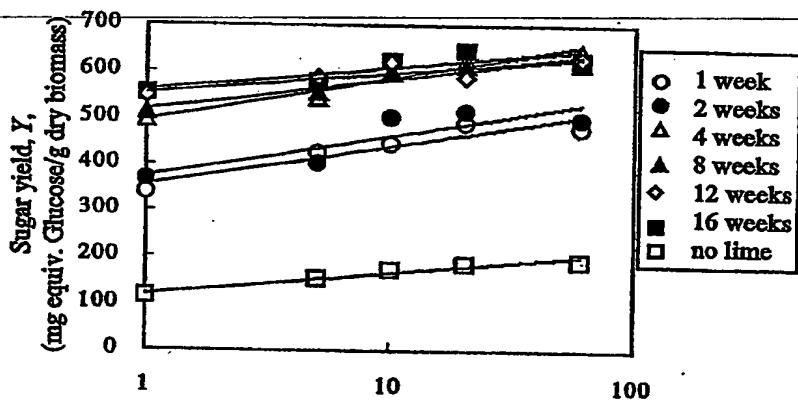
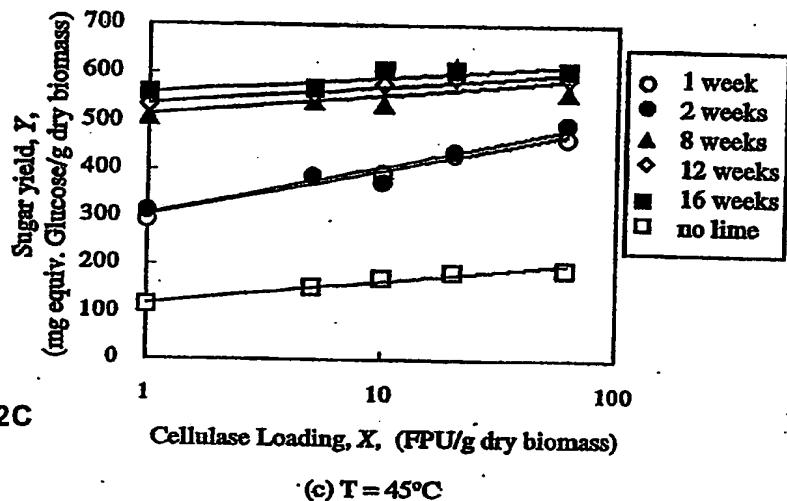


Fig. 62B

Cellulase Loading, X , (FPU/g dry biomass)

(b) $T = 35^{\circ}\text{C}$



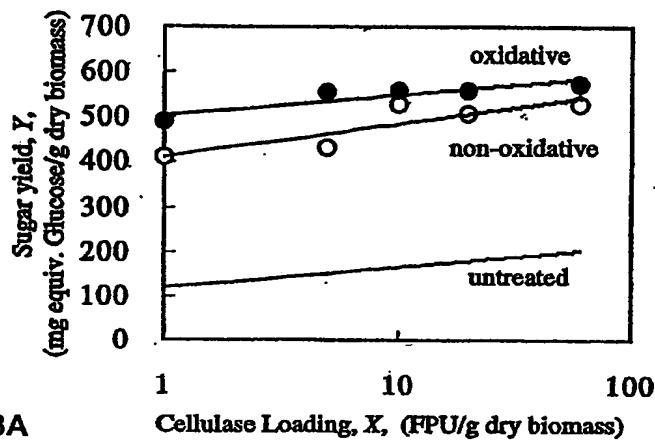


Fig. 63A

Cellulase Loading, X, (FPU/g dry biomass)

(a) $T = 25^{\circ}\text{C}$.

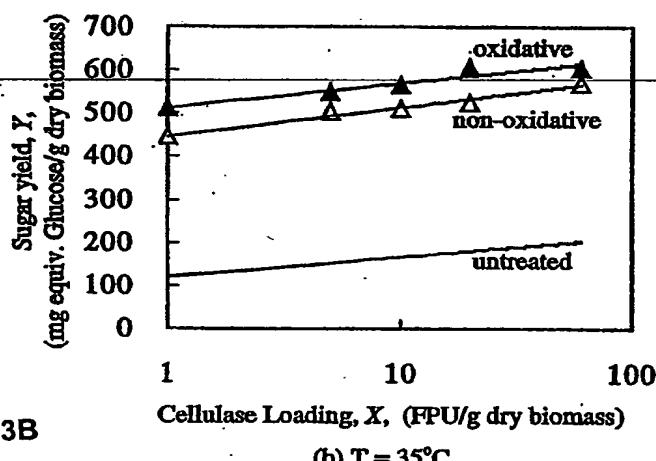


Fig. 63B

Cellulase Loading, X, (FPU/g dry biomass)

(b) $T = 35^{\circ}\text{C}$

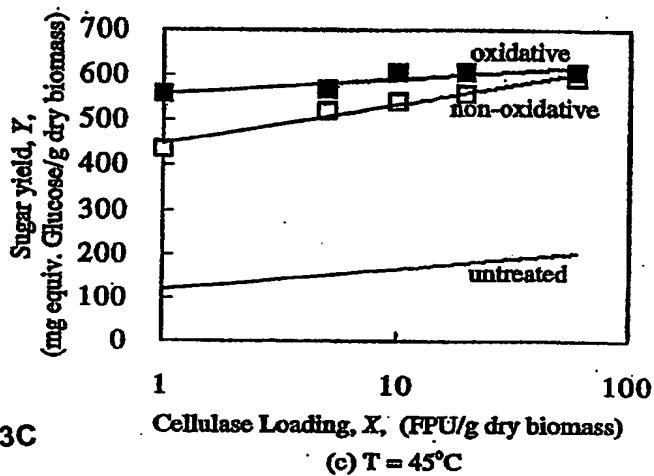


Fig. 63C

(c) $T = 45^\circ\text{C}$

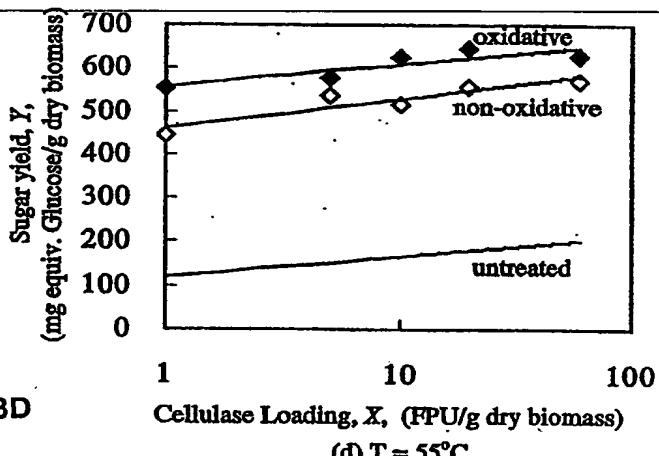


Fig. 63D

(d) $T = 55^\circ\text{C}$

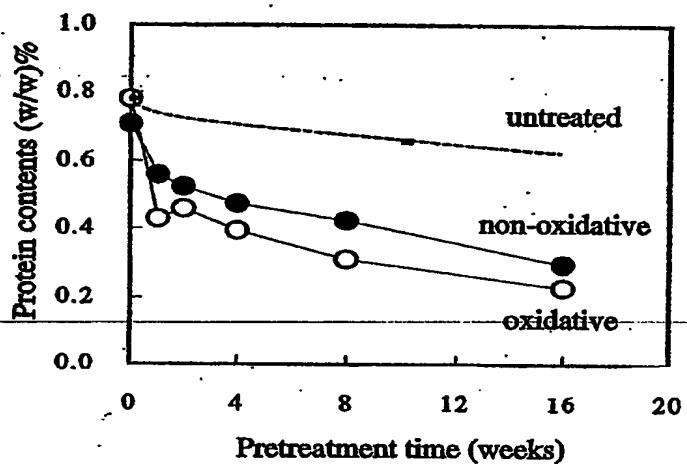


Fig. 64